
Distributed Generation (DG) Regulatory Issues

**Overcoming Market Rule Barriers:
The Key to a Mass Market for DG**

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The Many Faces of DG at KeySpan

✦ Across the KeySpan Family, DG Is Simultaneously and Independently Viewed From Different Vantage Points

- Source of Increased LDC Throughput and Revenues
- Market for Engineering, Construction and Operating Capabilities
- Hedge Against Electricity Price Volatility
- Expansion of Company's Generation Portfolio

KeySpan Is Well Positioned for the DG Market

✦ KeySpan Can Benefit From Several Potential “Value Streams” -- Unsurpassed by Any of the Competition

- Increased LDC Revenues
- Engineering and Construction Services
- Maintenance Services
- Substitution of Higher-margin LDC Sales for Wholesale Generator Gas Sales
- Provide “Holistic” Approach to Customer Energy Costs By KeySpan’s Unique Position to Manage “Btu Convergence”

Market Realities Enhance DG Opportunities

- ✦ Easier to Build Generation Than Transmission Lines
- ✦ Much of T&D System Is Over 50 Years Old
- ✦ 90% of Customer Outages Are T&D Related - Mostly “D”
- ✦ Over 75% of Generating Capacity Is 30+ Years Old
- ✦ DG Has Short Lead Times and Can Better Match Actual T&D Capacity Requirements
- ✦ Small DG Is Usually Treated As a “Load Modifier” - Avoiding the Purchase of ICAP Reserves for Customer Load
- ✦ DG Can Be Installed Without ISO Review (<10,000kW) - Avoiding Lengthy and Costly Approval Process

Overcoming Market Rule Barriers: The Key to A Mass Market for DG

- ✦ The Difference Between a Niche Market and a Mass Market
- ✦ Some Progress Has Been Made, but Much More Must Be Accomplished
- ✦ National and Local Concern Over Energy Have Created a Window of Opportunity
- ✦ Significant Resources Are Required to Be Successful

KeySpan Is Already Influencing Change

- ✦ Aggressively Pushed the Development and Approval of the NYISO's Very Successful Demand Response Effort, Now Widely Viewed As "Best-in-class" in the Northeast.
- ✦ Actively Engaged Through DPCA in Assuring That Effective Interconnection Standardization Language Is Accepted in NY and Other States, As Well As in Congressional Restructuring Efforts
- ✦ Representing DG Interests in NYPSC Generic Proceeding on Standby Rates and DG "Benefits"
- ✦ Chief Spokesman for Demand Response Initiatives at FERC NERTO Mediation Process

KeySpan-sponsored Accomplishments

- ✦ **Interconnection Standardization - New York, Delaware, New Jersey**
- ✦ **“Pre-certification” of DG Designs and Installations in New York. Has Become the Testing Model for UL and Other States**
- ✦ **Demand Response Programs - PJM, NYISO, NYPSC**
- ✦ **NYSERDA Funding for Demand Response**
- ✦ **RFQ Process Agreed to by NY TOs That Allows DG to Compete Against T&D Investment**
- ✦ **Federal Legislative Language Proposed and Accepted by House Committee to Allow Federal Agencies to Participate in Demand Response Programs at ISO Level**

A Comprehensive Approach Is Required to Facilitate a Market Transformation

✦ Regulatory - State

- Interconnection Standardization
- Standby Rates and Applicability
- Access to Energy Markets Through Demand Response Initiatives
- Delivery of Accurate Real Time Price Signals - Including Distribution Congestion Costs and Distribution Losses
- Use of Distribution Assets to “Wheel” Excess Power to Others
- Streamlining of Siting/permitting, Including allowance for “Stakeholder” Process

A Comprehensive Approach Is Required to Facilitate a Market Transformation

✧ Regulatory - Federal / FERC / Grid Market Rules / Regional Transmission Organization (RTO)

- Northeast RTO Order / Mediation / Business Plan July - Sept. 2001
- FERC Decision on Northeast RTO Authorization
- NERTO Implementation (12 - 48 Months)
 - Market Design (Energy, Capacity, Ancillary, Demand / Load Response / DG / Renewables / Alternate), Transmission Planning, Interconnection, Tariffs
 - Governance (Transitional / Permanent, Independent Board, Stakeholders Advisory)
 - Roll-out of Market Institutions
- DR/DG In Other RTOs Can Affect Market Rules in NERTO (SE, Midwest, West)
- Transitional Operation of Existing ISO DR/DG Programs

✧ Grid Reform Legislation

A Comprehensive Approach is Required to Facilitate a Market Transformation

⚡ Legislative - Federal and State

- Interconnection Standardization
- Emissions Trading
- Point-of-use Emissions Accounting
- Distribution Wheeling
- Power Park Exemptions to Service Franchise Restrictions
- Grid Reform (Enhance Role of DG)